

REMARKS

Reconsideration of the above-identified application in view of the foregoing amendments and following remarks is respectfully requested.

A. Claim Status / Explanation of Amendments

Claims 1-20 were pending and were rejected. As to the merits, claims 1-4, 11-12, and 14-19 were rejected pursuant to 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,025,894 to Shirasaki, et al. (“Shirasaki”). [11/5/07 Office Action, p. 2]. Claims 1, 4-7, 12-13, and 20 were rejected pursuant to 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,091,384 to Kubota, et al. (“Kubota”). [11/5/07 Office Action, p. 4]. Claims 1 and 8-10 were rejected pursuant to 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,947,105 to Miyatake, et al. (“Miyatake”). [11/5/07 Office Action, p. 5].

By this paper, claims 1, 5-6, 11, 15, and 20 are amended whereas claims 2-4, 12-14, and 17-19 are canceled without prejudice or disclaimer. Applicants reserve the right to pursue canceled claims in a continuing application. The cancellation of claims 2-4, 12-14, and 17-19 renders the rejection of these claims as moot. Claims 1, 5-6, 11, 15, and 20 are amended such that each recitation of a “reflective element,” an “output element,” and a “light emitting element” is respectively changed to a “first electrode,” a “second electrode,” and an “electroluminescent layer” throughout. Claim 1 is further amended to recite, *inter alia*, the limitation wherein “the direction shifting element reflects or refracts light incident to the direction shifting element so that light emitted by the electroluminescent layer reaches an interface between the electroluminescent layer and the second electrode at an angle that is less than the critical angle at the interface.” Similar and conforming amendments are made to independent claims 15 and 20. Claim 5 is also amended to depend from claim 1 instead of claim 4. Support for the

aforementioned amendments may be found throughout the application as originally filed including, for example, Figs. 2-3 and associated descriptive text.

No new matter will be introduced into this application by entry of these amendments.

Entry is respectfully requested.

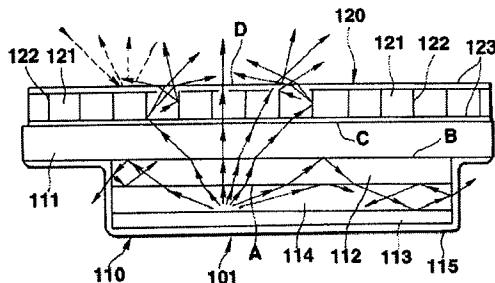
B. Claims 1, 5-11, 15-16, and 20 are Not Anticipated by Shirasaki, Kubota, or Miyatake

Applicants respectfully traverse the 35 U.S.C. § 102(b) rejection of claims 1, 5-7, 11-13, and 20 as allegedly being anticipated by Shirasaki or Kubota, and the 35 U.S.C. § 102(e) rejection of claims 1 and 8-10 as allegedly being anticipated by Miyatake. As set forth in detail below, neither Shirasaki, Kubota, nor Miyatake teach, disclose or suggest a direction shifting element located within the electroluminescent layer. Accordingly, the Section 102(b) and 102(e) rejections should be withdrawn.

Applicants' claim 1, as amended, recites:

1. A lighting system, comprising:
 - a first electrode having light reflectivity;
 - a second electrode of a light transmittance type
 - an electroluminescent layer located between the first and second electrodes, the electroluminescent layer including an organic electroluminescent material; and
 - a direction shifting element located within the electroluminescent layer, wherein the direction shifting element reflects or refracts light incident to the direction shifting element so that light emitted by the electroluminescent layer reaches an interface between the electroluminescent layer and the second electrode at an angle that is less than the critical angle at the interface.

Shirasaki is directed to a liquid crystal display apparatus used as both a reflection-type and transmission-type display and a method of driving the same. [Shirasaki, Col. 1, lns. 10-13]. In one embodiment, as shown by Fig. 28 below, Shirasaki discloses an organic electroluminescence (EL) device (101) comprising, *inter alia*, an organic EL layer (114)



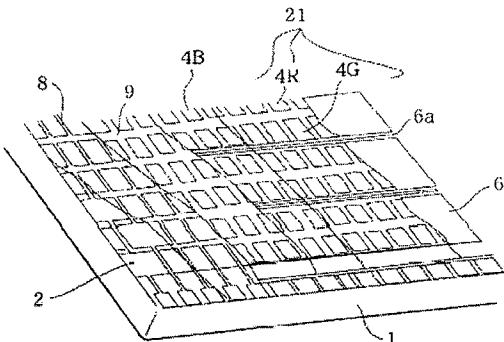
[Shirasaki, Fig. 28].

sandwiched between an anode (112) and a cathode (113). [Shirasaki, Col. 32, lns. 25-34].

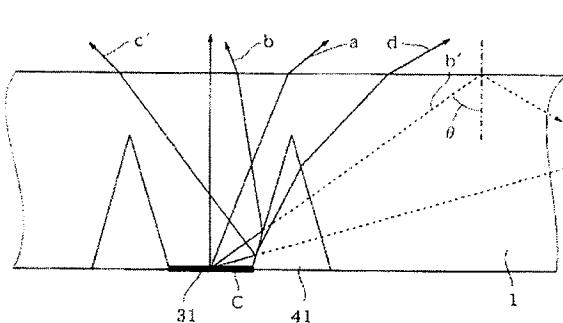
Shirasaki's organic EL device (101) also includes a scatter control film (120) comprised of light guiding portions (121), reflection films (122), and support sheets (123). The scatter control film (120) is positioned on a substrate which supports the anode (112), organic EL layer (114), and cathode (113). [Shirasaki, Col. 33, lns. 32-37].

The Office Action contends that Shirasaki's light guiding portions (121) and reflection films (122) correspond to Applicants' "direction shifting element" as recited in pending claim 1. However, Shirasaki's light guiding portions (121) and reflection films (122) are not located within the organic EL layer. That is, Shirasaki fails to disclose a "direction shifting element located within the electroluminescent layer" as recited in Applicants' amended claim 1. Applicants respectfully submit claim 1 is not anticipated by Shirasaki for at least this reason and the Section 102(b) rejection should therefore be withdrawn.

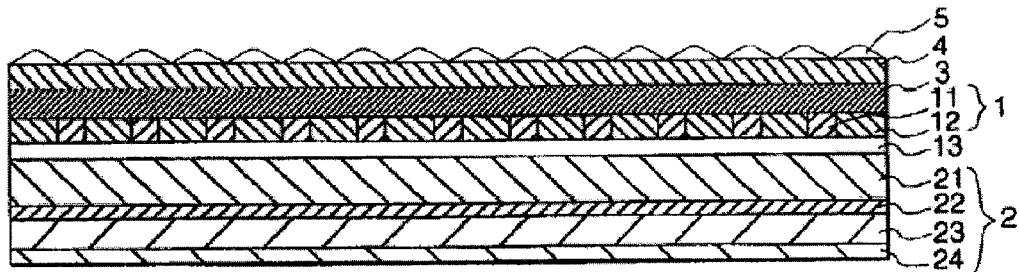
For reasons analogous to those presented above for Shirasaki, Applicants respectfully assert that claim 1 is not anticipated by either Kubota or Miyatake. Kubota is directed to a display panel constructed of organic EL pixels. In one aspect, as shown by Fig. 1 below, Kubota discloses a lighting system comprising, *inter alia*, an anode (2), a cathode (6), and an EL layer (21) provided on a glass substrate (1). [Kubota, Col. 3, lns. 44-56]. Kubota's lighting system further includes a wedged metal lattice (41) embedded in the glass substrate (1) as shown,



[Kubota, Fig. 1].



[Kubota, Fig. 8].



[Miyatake, Fig. 1].

for example, by Fig. 8, above. [Kubota, Col. 5 Ins. 33-36]. Miyatake is directed to an organic EL device comprising, *inter alia*, an organic EL element and a polarized light scattering film. [Miyatake, Abstract]. In one aspect, as shown by Fig. 1 above, Miyatake discloses a lighting system comprising a luminescent layer (23) positioned between two electrodes (22, 24). [Miyatake, Col. 2, ln. 64 to Col. 3, ln. 3]. Miyatake's lighting system further includes a polarized light scattering film (1), and optical parts (3, 4, and 5) which are formed on a substrate (21) which also supports the electrodes (22, 24) and EL layer (23). [Miyatake, Col. 11, Ins. 10-21].

The Office Action contends that Kubota's wedged metal lattice (41) and Miyatake's optical part (4) are analogous to Applicants' "direction shifting element." However, as was the case for Shirasaki, these alleged direction shifting elements are not located *within* the EL layer. This patentable distinction is readily apparent from a visual comparison of the embodiments of

Shirasaki, Kubota, and Miyatake with Applicants' Fig. 2, which clearly shows that the direction shifting element (28) is located within the EL layer (25).

Accordingly, Shirasaki, Kubota, and Miyatake each fail to teach, disclose, or suggest a "direction shifting element located within the electroluminescent layer" as recited in Applicants' amended claim 1. Applicants respectfully submit claim 1 is not anticipated by Shirasaki, Kubota, and Miyatake for at least this reason. Independent claims 15 and 20 are directed to a display comprising this same limitation and, hence, are asserted as patentably distinct for at least similar reasons. Claims 5-11 and 16 depend from claims 1 and 15, respectively, and, hence, are also asserted to be in condition for allowance.

Applicants have chosen in the interest of expediting prosecution of this patent application to distinguish the cited documents from the pending claims as set forth above. These statements should not be regarded in any way as admissions that the cited documents are, in fact, prior art. Furthermore, Applicants have not specifically addressed the rejections of the dependent claims. Applicants respectfully submit that the independent claims, from which they depend, are in condition for allowance as set forth above. Accordingly, the dependent claims also are in condition for allowance. Applicants, however, reserve the right to address such rejections of the dependent claims in the future as appropriate.

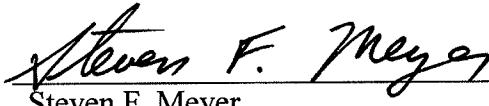
CONCLUSION

For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is earnestly solicited. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 13-4500, ORDER NO. 5000-5111.

Respectfully submitted,
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Dated: March 5, 2008

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